

LIBRARY
UNIV. OF IDAHO
RUSCOW



"I HEAR IT'S AMERICA'S
GREAT TRUCK VALUE"



"YES, AND IT'S THE
ONLY ONE THAT GIVES
YOU 3 BIG FEATURES"

"What do you mean, three big features?"

"Well, for one thing, no other truck has a V-8 engine. It's a real truck engine, too, with heavy-duty connecting-rod bearings, like they use in racing cars and airplane engines. Full-length water-jackets too. That's mighty important when you're hauling a full load with the temperature a hundred in the shade. Why, I could talk about that V-8 engine all day. It's got everything a real truck engine ought to have."

"It sure has. What's the second feature?"

"That engine exchange plan. Just think! After you've run your truck forty or fifty thousand miles, you don't have to lay it up for two or three days to get the engine overhauled. The Ford dealer just puts in

a block-tested, factory-reconditioned engine for less than the cost of overhauling."

"Is that so? First time I ever heard of such a thing."

"That's because there isn't another truck at its price that gives you a service like that."

"Say, that's fine; now what's the third feature?"

"Full-floating rear axle. You can pull out your axle shaft without jacking up the truck. Axle shafts last longer, because the weight of the truck is carried on the axle housing. All the shaft has to do is transmit power."

"Say, with features like that, I guess the Ford V-8 is the truck I should get. It looks like a great value. The next time I'm in town, I'm going to look at a Ford V-8 Truck just like yours."

NO OTHER TRUCK AT ANY PRICE GIVES YOU ALL THESE BIG FEATURES

V-8 Truck Engine . . . Uses no more fuel than a "four." Just divides it into smaller parts and gets more use out of it. 80 horsepower. Dual carburetor, valve seat inserts, full-length water-jackets, new oil-saving pistons, factory-polished cylinder walls and new-type, heavy-duty connecting-rod bearings are all features that increase power, performance and economy.

Low-cost Engine Exchange Plan . . . After thousands of miles of use, you can have a block-tested, factory-reconditioned engine installed for less than the cost of an overhaul job.

Full-floating Rear Axle . . . Entire weight of truck and load carried by axle housing. Axle shafts have nothing to do but transmit power. Remove axle shafts without jacking up truck.

Full Torque-tube Drive . . . Trouble-free Clutch and Four-speed Transmission . . . Deep, Heavy Frame with side members seven inches deep and six big cross-members.

Semi-elliptic Rear Springs free-shackled at both ends . . . **Long-lived Brakes**, more than 465 square inches of braking area.

THE NEW FORD V-8 TRUCK

FORD MOTOR COMPANY
3677 Schaeffer Road, Detroit, Mich.

Gentlemen: Please send me, without obligation, free booklets, on New Ford V-8 Truck, including Ford Engine Exchange Service.

Name _____
Route _____
Post Office _____
State _____

FRUIT CROP PROSPECTS FOR 1934

WITH the exception of the cherry, indicated fruit crops in the United States for 1934 are below the 1927-31 five-year average. A large number of factors are responsible for this condition, though it is largely due to winter injury, late spring frosts and dry weather.

The present season follows a year in which several major fruits were also below normal, especially the peach crop. This year, however, while there is an indicated peach crop above last year, the mid-year condition of the apple crop is the second lowest on record. Only one commercial apple state (Arkansas) will have an appreciable above-average crop, while three states (Massachusetts, Michigan and Idaho) showed this condition in 1933.

More detailed reports of the fruit crop situation, as observed and summarized by various secretaries of state horticultural societies and other statisticians follow:

Massachusetts—Estimates on McIntosh vary from 50% to 80%. Baldwin shows severe injury as to fruit and trees with estimates from 10% to 35%. Pears are reported 50% to 60% of 1933.—*W. R. Cole.*

New York—With other fruit crops way below normal this year, housewives of New York State may have to depend on cherries to offset the scarcity of other fruits. A shortage of apples, peaches and pears is reported.—*N. Y. Coll. of Agri.*

New Jersey—There will be no commercial crop of peaches this year. A few varieties, such as Cumberland, Eclipse, Greensboro and Golden Jubilee, will have a light crop. The apple crop will be about the same as last year or between 50% and 60% of a full crop.—*Arthur J. Farley.*

Pennsylvania—The carlot apple district of southern Pennsylvania seems to have a good crop of most varieties in sight. As a whole, June 1 estimates placed the apple crop at 50%, the peach crop at 1%.—*R. H. Sudds.*

Ohio—The set on apples indicates not more than 40% of the light crop of 1933. Rome Beauty shows a 65% prospect, with some of the better cared for and more favorably located orchards indicating nearly a full crop.—*F. H. Beach.*

Illinois—Apple prospects in general are poor and spotted. Summer apples are below last year. The total yield of peaches will not exceed 800 cars.—*Arthur P. Hill.*

Michigan—The reported June 1 condition of the apple crop is the lowest in 12 years. Summer apples are reported fairly good but Baldwins are extremely light. Southern Michigan will have some peaches, possibly a total of 200 cars. The cherry crop in the Grand Traverse region is lighter than last year, many orchards running from 30% to 60% of a crop.—*E. D. Hootman.*

Wisconsin—A good crop of apples and cherries this year. Plums set unusually well. This is another season when irrigation was profitable. In spite of the shortest strawberry crop in history, prices did not rise very high. A poor crop is a calamity for both the individual grower and the community.—*H. J. Rahmlow.*

Minnesota—In most sections the apple crop will be light. Wealthy is estimated at about 30% of normal. The plum crop will be larger than usual this year.—*J. D. Winter.*

Iowa—The fruit situation is as follows: Apples 46% of a normal crop. (Continued on page 11)

AMERICAN FRUIT GROWER

(Title Registered in U. S. Patent Office)

VOLUME 54 No. 7

JULY, 1934

CONTENTS

Fruit Crop Prospects for 1934.....	2
Over the Editor's Desk.....	4
Which Would You Buy?.....	5
By Dean Halliday	
American Pomology.....	6
A Page Conducted in the Interests of the American Pomological Society.	
New Tree Fruits—Their Origin and Value, Part II	7
By George H. Howe	
State Horticultural News.....	8
"Every Grower's" Page	10
By T. J. Talbert	
Removing Fruit Stains	12
By Mary Lee Adams	
Seasonable Fashions	12
Canning Food for Health and Economy	13
By Myra Potter Bregger	

THE LAW OF SUPPLY AND DEMAND

THE control of prices by supply and demand is as immutable as the law of gravity. Most efforts to raise prices by artificial means have been unsatisfactory. Evidence of this fact is seen in the prohibition of price fixing in all future NRA codes. Price fixing in earlier codes produced artificial high price levels. High prices stimulate over-production but retard consumption, thus aggravating the surplus problem. The NRA policy of permitting price fixing in earlier codes but prohibiting it in the future is inconsistent and will undoubtedly result in the elimination of price fixing in all codes.

The efforts of the AAA are now directed principally to the control of supply and the elimination of waste due to over-production. Control of supply is of much greater importance to the growers of grains, cotton, tobacco, etc., than it is to fruit growers. Even a seasonal shortage of these commodities may not greatly raise prices because storage in elevators and warehouses assumes enormous proportions, and the carryover is not easily consumed in a short time. Each year's demand for fresh fruits is usually supplied from the season's crops, and a scarcity of many fruits this year will result in a significant increase in price.

The law of supply and demand now bids well to become operative to the advantage of fruit growers. The outlook for the second smallest apple crop in the history of the Department of Agriculture has already heartened many orchardists. The price index of all agricultural commodities, shown below, indicates a healthy outlook for the fruit industry.

INDEX NUMBERS OF FARM PRICES

Year and month	Grains	Fruits and vegetables	Cotton and cotton-seed	Meat animals	Dairy products	Poultry products	All groups
1934 May	78	105	90	63	76	69	74

Since 100 represents the average price in the years 1909 to 1914, the prices now being paid fruit and vegetable growers are actually five per cent higher than they were before the war. Better times are certainly not far away.

AMERICAN FRUIT GROWER

Published Monthly by

AMERICAN FRUIT GROWER PUBLISHING CO.
1370 Ontario St., Cleveland, O.

SUBSCRIPTION RATES

Domestic Except Cleveland 3 years \$1.00. 1 year 50c.
Cleveland and foreign (except Canada) \$1.00 per year.
Canada (Including tax) \$1.50 per year.
Entered as second-class matter at Post Office at Cleveland, Ohio, under the Act of March 3, 1879.

E. G. K. MEISTER

Publisher

JOHN T. BREGGER

Editor-in-Chief

DEAN HALLIDAY

Managing Editor

BENJAMIN WALLACE DOUGLASS

MARY LEE ADAMS—T. J. TALBERT

Associate Editors

ROGER FISON, EASTERN MGR.

280 Madison Ave., Room 1110

New York, N. Y.

Phone—Caledonia 5-0738

Over the Editor's desk

THE 73rd Congress of the United States has not only become but has made history. Many opinions have already been voiced concerning the effect of this new legislation on the people, from the largest producer to the smallest consumer. But what can be said about it from the standpoint of the fruit grower?

On the basis of actual and far-reaching legislation enacted, it can be safely stated that the last Congress did more for Agriculture than any single Congress in the history of our country. If there is any exception to this statement, it would be in making exception to those sessions in which were enacted the Acts making possible the Agricultural Colleges, the Experiment Stations, the Agricultural Extension Service, and Vocational Education in agriculture. Certainly the need for agricultural aid has never been greater than it is now.

The separate Acts which have benefited Agriculture will only need mentioning to vision their importance. The AAA must necessarily head the list, though the Gold Reserve Act may eventually result in more permanent stability of farm prices. The Farm Credit, Farm Relief and Crop Loan Acts have aided thousands of farmers to meet acute individual problems and to maintain their operations as well as their homes. Prohibition repeal has among other effects put many grape growers back into profitable production. Other Congressional Acts, while not designed particularly to aid Agriculture, have given security and hope to many. Chief among these may be mentioned the Reciprocal Tariff Act which authorizes the President to negotiate reciprocal treaties to stimulate trade with other nations. With the proper functioning of this and the other important measures, it is entirely possible that Agriculture may see a new day of hope, if we who are to be benefited will not stand in the way of our own recovery.



THE consumer is fast being influenced to look upon spray residue as poison whether it is or not. Regardless of future governmental regulations or those now in force, growers are finding that they must meet this situation. Consumer demand is and will always remain the most important factor with which to cope in the marketing of any product.

There are, however, three methods of meeting the issue involved. In the first place, a grower may cut down his spray program to the point where there is no residue problem. This of course is only good practice if pest control is still possible under such conditions. It is the situation which exists in some of the northeastern states and in other districts having a comparatively short growing season.

On the other hand, a grower may utilize a full spray program involving arsenate of lead, and plan on washing his fruit after harvest. This is the spot where too many people "sit on the fence." The regular spray program in most states is designed for the purpose of controlling codling moth. It was not designed from the standpoint of avoiding the necessity of fruit cleaning. There is no middle ground in such a plan.

The third method of meeting the issue involves the

use or substitution of spray materials for late application which will not leave any or sufficient residues to make washing necessary.

Substitute insecticides now being recommended for late cover sprays in such a program include oil-nicotine; nicotine-bentonite sulphur (nicotine tannate); refined natural cryolite with fish oil; and calcium arsenate.

Fortunately, it is not too late in some orchards to change from one policy to another in order to accomplish the desired results. If a policy has been formulated, however, and fruit cleaning is inevitable, no time should be lost in providing proper machinery or facilities, and in determining what materials will best remove the particular spray residue which is being built up.

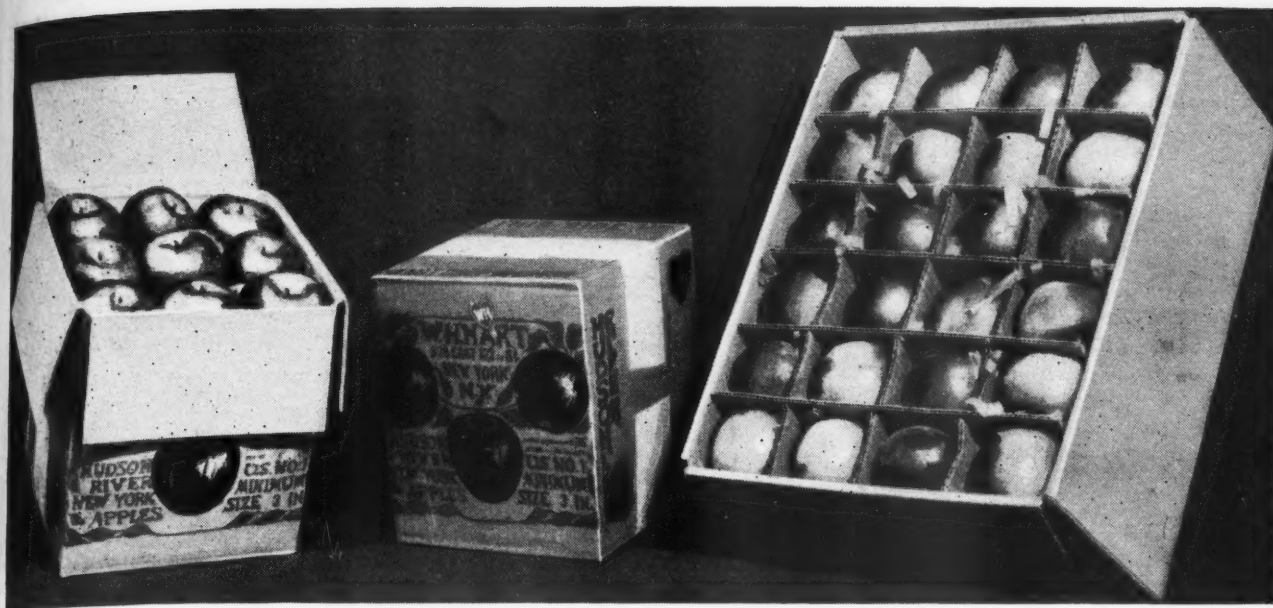


THE late Anthony Spuler of Wenatchee, Wash., will long be remembered for the far-reaching results of his experimental work in codling moth control. During several summers that these studies were being made, Mr. Spuler had for his assistants several students of the Washington State College who were specializing in entomology and pomology. But in observing the quality of work being done by these boys, he made an interesting discovery. It so happened that the entomology students were invariably more efficient in spraying than the students in pomology. The reason for this difference given by Mr. Spuler at least seems significant and concerned what the boys were thinking about. The pomology students, he reasoned, were thinking of the tree, its leaves and apples, while the entomology students were thinking of codling moth eggs, worms, mites, etc., located in every conceivable place on the tree. Students of one group were apparently trying to cover the tree, while the others were attempting to hit and poison the pests. The latter system, he found, gave the best results. *So keep your mind on the bugs!*



ONE of the most harmful practices indulged in by fruit growers concerns the matter of selling immature fruit. The temptation to place fruit on the market as early as possible, probably results in more dissatisfied consumers than any other single practice. True it is that early market prices are very attractive and all too often this first sale of poor quality fruit brings the highest price of the entire season, while the properly colored and matured fruit must be sold on a much lower market, and often at a loss. But the total returns from the entire crop are invariably much less than they would have been if the green fruit had not been allowed to break the market. All this because a few or more growers were too selfish to wait until they had a product that they could be proud of and one equally satisfactory to the consumer. Will fruit growers ever learn that good business results only when the consumer gets a fair deal and receives the type of product which makes him a steady customer?

J. T. Bregger



WHICH WOULD YOU BUY?

By DEAN HALLIDAY

WOULDN'T you like to be engaged in an industry which was being helped in the merchandising of its products by virtually every other industry engaged in selling to the consumer?

Practically every product prepared for home or personal consumption is paving the "salesway" for the modern merchandising of fruit. We refer to packaged products.

Fruit, today, has as its sales allies a bewildering range of commodities. The list is too long to be put down here, but it covers the alphabet from A to Z. It includes new products,

and, more important, old products that, Cinderella-like, have been transformed from bulk commodities into packaged items with increased sales appeal.

The shelves of retail stores, markets and shops show a constant stream of products which, every day, are educating the purchaser to look and ask for packaged brands. Yet growers of fruit, which by its very nature lends itself to attractive, sales-appealing packaging, are slow to take advantage of the opportunity offered. The barrel and bushel

basket die hard. They are dying hard, not because the consumer clings to them, but because the producer and packer have not kept up with the sales parade of other products. The fruit industry at large, engrossed in other problems, has not given proper consideration to the consumer in the matter of packing and selling.

Certain fruits, however, notably blueberries and strawberries, have demonstrated that sales will increase when they are offered in modern packages, designed for consumer

(Continued on page 15)



AMERICAN POMOLOGY

*A Page Conducted in the Interests of the
American Pomological Society*

OFFICERS FOR 1934

President: B. S. Pickett, Ames, Iowa.
Vice President: W. A. Taylor, Washington, D. C.
Vice President: W. S. Blair, Kentville, Nova Scotia
Secretary: H. L. Lantz, Ames, Iowa.
Treasurer: H. C. C. Miles, Milford, Conn.

BOARD OF MANAGERS

Robert Simpson, Vincennes, Ind.
J. H. Gourley, Wooster, Ohio.
J. C. Blair, Urbana, Ill.

EXECUTIVE COMMITTEE

W. H. Alderman, St. Paul, Minn.
W. S. Brown, Corvallis, Ore.

EXECUTIVE COMMITTEE

C. E. Dutton, Milford Center, Ohio.
S. W. Fletcher, State College, Pa.
Laurenz Greene, Lafayette, Ind.
N. E. Hansen, Brookings, S. D.
Wesley Hawley, Ludington, Mich.
W. S. Perrine, Centralia, Ill.
H. L. Price, Blacksburg, Va.

EXECUTIVE COMMITTEE

H. J. Rahmlow, Madison, Wis.
Robert Simpson, Vincennes, Ind.
T. J. Talbert, Columbia, Me.
C. C. Taylor, Louisville, Ky.
W. P. Tufts, Davis, Calif.
H. B. Tukey, Geneva, N. Y.
R. A. Van Meter, Amherst, Mass.

W. S. HART, New Smyrna, Fla., distinguished horticulturist, made history in the citrus industry in his adopted State. The story of his career reads like a romance from O. Henry. Born in New Hampshire, in 1851, Mr. Hart listened as a boy of 14 to the reading of a letter from Colonel Hart of Palatka, Fla., and decided that he would make orange growing in Florida his career. It was nine years later that he arrived in the promised land after an unfortunate experience en route, when he lost most of his money and worldly possessions in a fire which destroyed his steamer on the Mississippi River at St. Louis.

Developing the business was slow work for a man with little capital, but by 1894 Mr. Hart's groves were beautifully developed and yielding a fine annual profit of \$5,000 a year. Then came the freezes of 1894, 1897, and 1899, killing his trees almost to the roots.

Says Mr. Hart, "By the use of brain and past experience, they were brought back to production at as early a date as any others. The returns were very liberal, and I enlarged the areas each season until I had all that I could care for and hold to the high standard of product that I insisted upon. My plan was to improve some part of my output each year, and, by so doing, I was able to secure the wealthy patronage that willingly paid the highest prices obtainable and to maintain a never failing demand.

"Protection from cold injury was inaugurated at a decided profit, as it insured both my trees and fruit for the lean markets when a large part of the State's crop was destroyed.

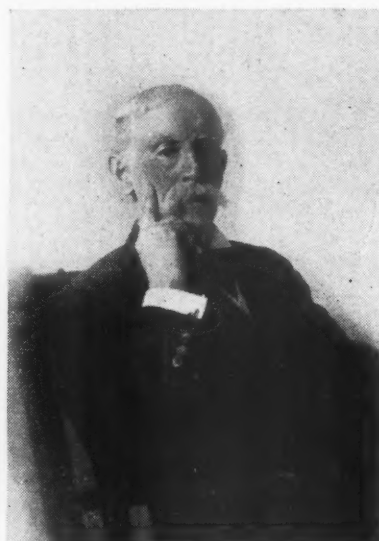
"My record became noticeable and the scientists of the U. S. Department of Agriculture and the State experiment station came to me and swapped their latest findings in their groves for those of mine, greatly to my profit and seemingly to theirs, and other citrus growing states exchanged knowledge with me.

"Early in my pioneer days here, I became interested in bee culture and purchased two colonies, which number was built up to 116 colonies by 1894, and in that year gave me 101 forty-gallon barrels (20½ tons), besides the 20 or more pounds left in each hive to carry the bees along to the winter flow.

"This proved to be so remarkable that A. I. Root of Medina, Ohio, publisher of 'The A B C of Bee Culture,' and other apiarian literature, came down to investigate. He published his findings, and Frank Benton, in charge of the apiary branch of the U. S. D. A., wrote me that I had broken the record of honey production in this country, which may have meant the world, as I have kept well posted and never learned of one equalling it."

Mr. Hart has served in public capacities

in many offices and organizations. A list of his services would fill plenty of space in a "Who's Who of American Pomology". Thirty years as secretary or treasurer of the Florida State Horticultural Society, for many years director or in other offices of the Paniter Fertilizer Company, the Fidelity Bank of New Smyrna, the Florida Citrus Exchange, which he helped to organize, Glen St. Mary Nurseries Company, North American Beekeepers'



W. S. HART

Association, Florida Fire and Casualty Insurance Company, and others.

The American Pomological Society is delighted to pass along the above remarkable record to its members and to the other readers of this page.

C. H. True of the Bonnie View Fruit Farm at Edgewood, Iowa, reports his pleasure at receiving the last annual report and writes at some length on the prospects for a fruit exhibit at the Century of Progress in 1934. Mr. True recalls with enthusiasm the fine show at the Columbian Exposition in Chicago in 1893. Mr. True was one of the first Iowa pomologists with whom the writer of this page became acquainted when he came to Iowa some years ago, but it was only this year that he learned of Mr. True's long-time connection with the A. P. S.

William S. Myers, whose address is Route 3, Bainbridge, N. Y., contributes a very interesting item that will be especially intriguing to motion picture fans.

Mr. Myers for many years was the North American representative of the Chilean Nitrate Producers. In 1922-23, this organization brought out a motion picture of apple production, featuring the

use of Chilean nitrate of soda in apple orchards. This picture had more than a thousand showings.

In the production of this picture, writes Mr. Myers, the scenario was written by Mrs. Myers and the personification of "Chilean Nitrate" was done by Claudette Colbert, who now has a world-wide reputation as a charming and skilful motion picture actress.

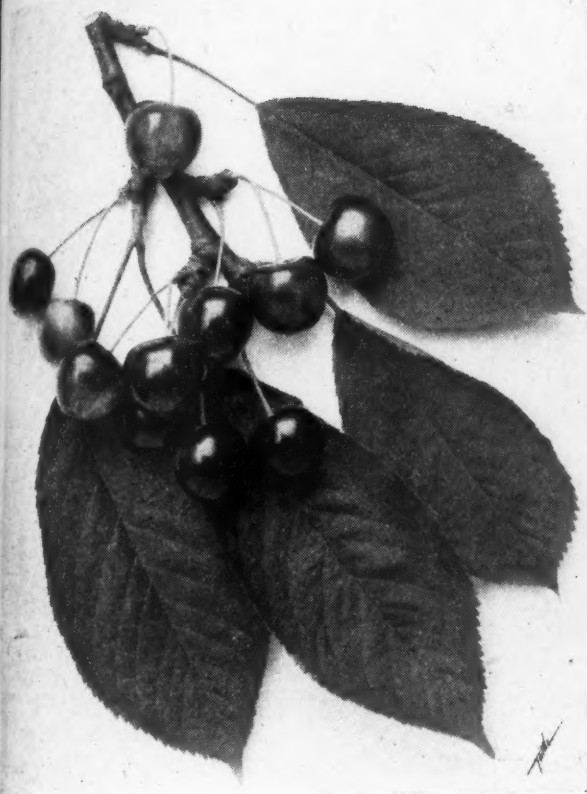
Says Mr. Myers, "The fact that I started her in the motion picture work by way of producing her first picture is gratifying, of course, to my wife and myself. This item of news has never had any publicity, and should you publish it, it will be the first time the general or the pomological public has had it."

Century of Progress Exhibit—Members of the A. P. S. and readers of this page may recall that opinions were invited on the advisability of undertaking the installation of an exhibit of fruits at the Century of Progress Exposition during the present summer. The response indicated plenty of interest but doubt as to financing. Regrettably this project is being abandoned.

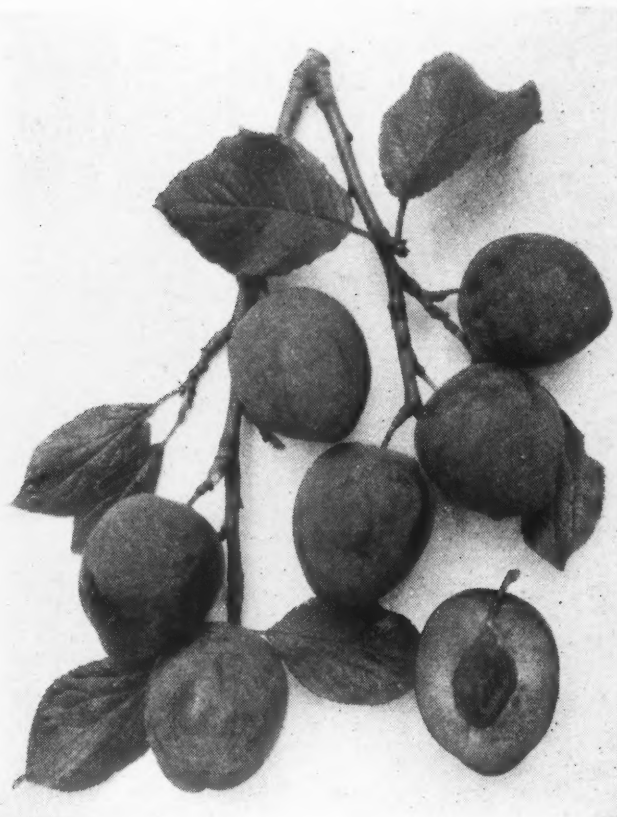
Horticultural Tour—During the summer months President Pickett occasionally conducts a travel course for students in horticulture. This year he plans to conduct such a course, covering a number of states east of the Mississippi River, visiting nurseries, orchards, vegetable crop farms, greenhouses, agricultural colleges, botanical gardens, arboretums, plant manufacturing horticultural supplies, and other horticultural enterprises. The itinerary will touch a few points in each of the following states: Iowa, Missouri, Illinois, Indiana, Ohio, Kentucky, Tennessee, North Carolina, Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Ontario, Canada, and Michigan. The trip will cover the period from July 19 to August 22, inclusive. It is hoped to make a number of contacts with A. P. S. members en route. Although not planned as an A. P. S. tour, a limited number of interested persons would be a welcome addition to the party. The plan of travel is designed to meet the needs of students at low cost.

Securing the Annual Report of 1933—Send your membership now and get a copy of the report of the Springfield meeting. It has up-to-date articles on spray residue and its removal, orchard irrigation in humid climates, apple scab and codling moth control developments, new varieties of all kinds of temperate zone fruits introduced in the last two years, and other subjects. Membership is \$1.25, which entitles you to the report, subscription to AMERICAN FRUIT GROWER, and numerous general communications from the secretary's office.

AMERICAN FRUIT GROWER



Emperor Francis Cherry



Albion—A Good Late Plum

NEW TREE FRUITS THEIR ORIGIN AND VALUE

PART II

By **GEORGE H. HOWE**
New York Experiment Station

A HALF century ago peach growing in America was a profitable enterprise. We might ask why has it slumped in the last decade or two? Probably because people do not like the old prevailing varieties! Several experiment stations in this country and Canada have undertaken to breed a new set of varieties, so that we can have peaches that are "peaches".

From the New Jersey Experiment Station have come Marigold, Oriole, Golden Jubilee, and Eclipse, ripening in the order named. Marigold, a good yellow-fleshed freestone ripening two weeks ahead of Carman, is a cross between Lola and Arp. It originated in 1916 and was introduced in 1925. Oriole, perhaps the best of the four in all characters, ripens a week after Marigold and a week ahead of Rochester. It is a large yellow freestone of excellent quality. A cross between Slappey and Dewey in 1916, Oriole was first disseminated in 1924.

Golden Jubilee, a second generation seedling of Elberta and Greens-

boro, has been finding favor among New Jersey growers as a large early yellow freestone of the Elberta type, but better in quality and ripening about three weeks earlier. This seedling originated in 1921 and was first sent out in 1926. Eclipse is a self-pollinated seedling of Belle, which originated in 1914, and first sent out for trial in 1924. It ripens a week after Oriole and a week ahead of Elberta. Eclipse resembles its parent and is better in quality.

The three V's from the Horticultural Experiment Station at Vineland, Ontario, ripening in the order named are Vedette, Valiant, and Veteran. The first two were sent out for trial in 1925 and the last in 1928. All of these make a succession of high-quality peaches. Vedette ripens a few days before Valiant or about 10 days ahead of Elberta. It came from an open-pollinated seed of Elberta in 1915, and is a large yellow-fleshed freestone of good quality. Valiant, the second of the three V's to ripen, is another open-

pollinated Elberta seedling, probably self-fertilized, which originated in 1917. Few peaches surpass it in fruit characters. It resembles its parent, ripens about a week earlier, and is surpassingly good in quality. Veteran, the latest of these three seedlings to ripen, is a cross between Vaughan, a Canadian seedling, and Early Elberta, made in 1919. It is very similar to Valiant in all respects, but ripens a few days later.

This discussion of peaches would be incomplete without a word about nectarines. The nectarine is a smooth-skinned sport of the peach, commonly termed the "fuzzless peach". Nectarines add variety and charm to the list of hardy fruits. All that is needed to make them as popular as peaches is a greater number of varieties adapted to American conditions. Two varieties now especially recommended are Hunter and Sure Crop. Hunter is supposed to have come from an Elberta pit planted in 1916 by Harry Hunter,

(Continued on page 9)

AMERICAN FRUIT GROWER

Page 7

*Maintain
Your Regular
Spray Schedule*

VATSOL

REMOVES
SPRAY RESIDUES
well below the
tolerance limits

Use lead-arsenate—with an oil sticker if you wish—and don't worry about Government residue tolerances. A few pounds of *Vatsol* in the washing solution will remove the residue even from waxy or oil-lead sprayed apples. *Vatsol* was used last season by the leading Eastern and Northwestern growers and packers. Not a single rejection was reported.

Vatsol, a "degumming agent", brings the cleaning solution in immediate and complete contact with the surface of the fruit. Cannot harm the fruit or impair the keeping qualities. Saves the cost of heaters (if you have heaters, use a weaker *Vatsol* solution). Washing with a *Vatsol* solution costs less than 1/2c per bushel.

● Our instruction leaflet explains how *Vatsol* gets results. Dealers in every important apple section stock *Vatsol*. We will gladly send the leaflet and name of nearest dealer.

Note: There is only one VATSOL
... accept no imitations!

TRADE
VATSOL
MARK

AMERICAN CYANAMID
& CHEMICAL CORP.

Insecticide Division

30 Rockefeller Plaza, New York City, N. Y.

224 Dwight Building,
Kansas City, Mo.

Azusa,
California

STATE HORTICULTURAL NEWS

Maine State News

In Maine the topic of the day is, not how large will be the apple crop but how many trees will survive. Winter injury was so great as to justify a special survey of the damage, and such a study will be conducted in July under the leadership of the State Horticulturist. A preliminary reconnoitering trip gives the following information.

McIntosh came through with very, very little injury. Only where McIntosh had been grafted into Ben Davis, Starks, and perhaps some other old tops was any extensive injury found. Delicious came through fairly well in general, but certainly not so well as McIntosh. For example, at Orono, the McIntosh set is quite satisfactory, but there will be no Delicious crop.

The Golden Delicious trees are in fair condition, and although bark splitting has been observed and some cases where the fruit buds were killed, in other cases there is a fair set of fruit. Trees of this variety are probably somewhat retarded in growth, but there is no question about their survival.

Wolf River could have been spared, but is one of the least injured. Northern Spy has been quite variable in its response to the severe winter. Several blocks are reported to have been killed outright, but in general the variety weathered it rather well. Cortland, which had been having a slump in public esteem, has regained much favor because of the excellent present condition of its trees.

Baldwin received what may very well have proved a death blow; yet some men are planning to re-plant this variety. The orchard mortality ranges from 20 per cent to 100 per cent. Probably three-fourths of Maine's Baldwin trees will be gone by the spring of 1935. Bens, Starks, Greenings, and Gravensteins suffered severe damage.

As to the crop, it will surely not exceed 25 per cent, and has been estimated as low as 20 per cent of the previous five-year average.

Orchardists here, as elsewhere, are an optimistic lot and will be re-planting with better varieties. The loss has predominately occurred to old trees; young orchards were apparently little hurt. There will be more to report in succeeding months.

J. H. WARING, Orono.

Washington State News

An additional spray for the first brood codling moth is being applied generally this year, making five covers and a calyx application to date. No special difficulty has been encountered thus far in the fight against worms. The first brood has been split sufficiently to time the cover sprays effectively. The wind has been the most difficult factor to contend with.

As the second brood sprays are anticipated by the fruit grower the old question of spray residue must be considered. Many growers in the Wenatchee District would use the fluorine sprays if they knew what attitude the Federal Drug Administration was to take on fluorine analysis this fall.

AMERICAN FRUIT GROWER

Lead arsenate combined with spreader will probably be used by most growers for the July sprays. A few growers in the district are using nothing but mineral oil and nicotine as a spray throughout the season to avoid a residue problem this fall.

W. A. LUCE, Wenatchee, Wash.

Quaker State News

The Pennsylvania State College is interested in securing information as to what varieties of fruits were winter-injured in your locality, and what varieties were free from injury or relatively so in areas where injury did occur. Please take time to send a card if you have any observations to report. If enough material is gathered to show anything definite it will be published in some form or other and in this way made available for your benefit.

Send that card or letter to R. H. Suds, Department of Horticulture, State College, Pennsylvania. We want this information badly but there is no money with which to visit you. Such a winter may not come again for a long time—at least we hope so—and therefore we should gather this information while it is still fresh.

R. H. SUDS, Secy.

Utah State News

An orchard tour will be held by the Utah Horticultural Society in Utah County in early August, just before peach harvest. A field day will also be held in late July at the experimental orchard of the Utah Agricultural Experiment Station near Farmington to inspect the new early peach and plum varieties, including Golden Jubilee, Ideal, Sunbeam, South Haven peaches, and others.

F. M. COE, Secy., Logan, Utah.

Massachusetts State News

The grower with any fruit must take care of it; maybe it will pay; perhaps not but in any case the future will show results of care and feeding. Next year going to show the 1933-34 winter damage. It will be worse if a "don't care" attitude is adopted toward the orchard project.

The Executive Committee of the Massachusetts Fruit Growers' Association at a meeting June 9, voted to omit the proposed tour to Vermont the coming summer. They also voted that a summer meeting be held, the place and date to be determined by the President and Secretary.

The Massachusetts State College Extension and Home Week Program carries two days of excellent fruit topics, and will bring together a good number of fruit growers.

W. R. COLE, Secy.

The Ohio State Horticultural Society will hold its summer meeting at the Orchard Company Orchard (C. E. Dunn, manager) at Milford Center on Thursday, August 16.

Orchard Day at the Ohio Experiment Station is scheduled for the following day, August 17.

F. H. BEACH, Secy.

JULY, 1934

NEW TREE FRUITS

(Continued from page 7)

White Plains, N. Y., and introduced in 1924. It is a midseason, yellow-fleshed freestone, and, although tart, has the true nectarine flavor. Sure Crop has been found to merit its name. It is a large, handsome, late-midseason, white-fleshed freestone of high quality. Representatives of the U. S. D. A. received the variety from H. R. Wright, Avondale, Auckland, New Zealand, about 10 years ago.

With the present trend in cherry growing, the culture of good sweet cherries is offering, through special markets, a more profitable crop than is now possible with sour cherries. The earliest-ripening sweet cherry now known is Seneca. It originated as a cross between an old early-ripening German cherry, Early Purple Guigne, and an unknown early red sweet cherry. The cross was made in 1910. Nine years later the seedling tree bore a few fruits, the early ripening of which immediately attracted attention. After watching two full crops the seedling was named and introduced. The cherries resemble the well-known Black Tartarian and are about as large and well flavored. For the roadside and home markets Seneca is unsurpassed as the harbinger of the cherry season. Alas! it has one serious drawback. The birds like it as well as we do! Unless the trees can be protected, it is exceedingly difficult to harvest a full crop.

Following Seneca in season, a large, dark red, moderately firm-fleshed cherry named Lyons is gaining recognition among early cherries. The large trees are always very productive. Lyons originated as a chance seedling near Lyons, France, in 1822, where it has long been grown. It was only recently introduced to this country.

Another European cherry of the type of Napoleon and ripening two or three days earlier is Emperor Francis. This variety also originated by chance many years ago, probably in Austria, but only recently was it brought to this country. It is better than Napoleon and promises to be one of the best main-crop sweet cherries. Giant is an exceptionally fine, late, firm-fleshed, dark-colored sweet cherry. It is a hybrid of unknown parentage, raised by Luther Burbank in 1900 and introduced in 1914. It ripens a few days ahead of Lambert, is as large as that variety, is good in quality, and much less liable to crack. Its firm flesh makes it a desirable sort for shipping. An-

other point in its favor is that it is an excellent pollinator for Bing, Napoleon and Lambert, three sorts which are inter-sterile.

Interest in plum growing in the East has been waning for some time. This has been due chiefly to lack of good varieties. Three new European-type plums are now attracting considerable attention. Ripening in the order named, they are Hall, Stanley, and Albion. The parents of Hall are Golden Drop and Grand Duke. The seed was borne in 1908, and first fruited in 1915. Hall is choicely good in flesh and flavor characters. Stanley, a prune type,

promises to be a valuable addition to plum varieties because of its handsome good-sized fruits which are of excellent quality. Agen crossed with Grand Duke in 1913 produced this seedling which was named and introduced in 1926. Ripening a week or 10 days earlier than Italian Prune, it is better in tree and fruit than that well-known sort and will be used for the same purposes.

Albion is the latest ripening good plum known. It is a sister seedling of Hall which germinated in 1909. First fruiting in 1915, it was later named and introduced for trial as a

(Continued on page 10)

....It's the greatest improvement in Arsenical Poisons in twenty years!"

YOUR codling moth control problem is simplified. An arsenical of 15% to 30% increased efficiency, makes it so much easier to control the first brood so completely that late season sprays for 2nd and 3rd broods can be greatly modified, especially when the moth population is not abnormal. You need Orchard Brand



"Astringent" ARSENATE of LEAD

as the cornerstone of your 1934 apple spray program. Intensive commercial use last year rolled up a convincing record of successful results. We have published the growers' letters in Cash Crops. You should send for a copy and read the complete story of this and other Orchard Brand Products.

ASK US TO QUOTE YOU PRICES



ORCHARD BRAND

SPRAY and DUST MATERIALS

GENERAL CHEMICAL COMPANY • 40 Rector Street, New York
Atlanta, Baltimore, Boston, Buffalo, Charlotte, Chicago, Cleveland,
Denver, Kansas City, Los Angeles, Minneapolis, Montezuma (Ga.),
Philadelphia, Pittsburgh, Providence, San Francisco, Seattle, St. Louis
Please send me your new 1934 edition of CASH CROPS with complete spray schedules.

Name _____ Address _____

ORCHARD BRAND

LIME SULPHUR SOL
OIL EMULSION 83
DRY LIME SULPHUR
BORDEAUX MIXTURE
"APPLE DITOMIC" or
DITOMIC SULPHUR
ARSENATE of LEAD
"ASTRINGENT"
ARSENATE of LEAD
CALCIUM ARSENATE
ARSENITE of ZINC
NICOTINE SULPHATE
K-15 PYRETHRUM EXTRACT
PARADICHLOROBENZENE
BORDEAUX DUST
SULPHUR DUSTS

POMO

for removing **LEAD** and
ARSENIC residue

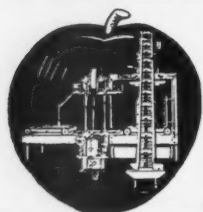
Added to the hydrochloric acid washing solution, POMO facilitates a more complete cleansing. This solvent was thoroughly tested and successfully used last year. With POMO your solution efficiently washes below the Government tolerance for lead and arsenic. At the same time, POMO gives these other practical results.

- ... enhances appearance of fruit.
- ... does not impair keeping qualities.
- ... minimizes danger of burning.
- ... works equally well in homemade or commercial washers.
- ... washes better at low cost.

For full particulars of the history and uses of POMO, write for literature.

W-B CHEMICAL COMPANY, Inc.
521 Fifth Avenue, New York

FARQUHAR



Make big profits by operating a Farquhar Cider Press. Built in sizes suitable for Roadside Marketing, the Individual Orchardist and Custom Pressing. It is easily operated, exerts heavy pressure and gets better and richer cider.

Write for Catalog
A. B. FARQUHAR Co.
Box 13 Ltd. York, Pa.

PRESSES

A New Deal in Hotel Rates

FINE ROOM with BATH from **\$2.50** To **\$5.00** Per Day

No additional charge when occupied by 2 persons

Careful management insures atmosphere of security, refinement and quiet. Convenient to all theatres and shopping centers. A Hotel of character and distinction selecting guests today ... as always.

FAMOUS TABLE D'HOTE RESTAURANTS
Breakfast from 30c Lunch from 40c
Dinner from 75c
Across from world-famous Radio City

HOTEL BRISTOL

129-135 W. 48th St., New York City
T. Elliott Tolson, Pres. Joseph E. Bath, Mgr.

Page 10

"EVERY GROWER'S" PAGE

By T. J. TALBERT

ROWERS of fruit crops will find that it generally pays to continue to spray thoroughly and timely during the summer season. Where codling moth is serious, it is highly important that the surface of the fruit be kept covered, because the codling moth will be found emerging and laying eggs almost continuously from three or four weeks after blooming time up until late fall. Of course, it is important to observe the peaks of emergence where possible through the maintenance and care of codling moth cages or by following reports of those in charge of breeding cages. If sprays can be timed, without too long an interval between sprays, so the applications are made at peak emergence periods, better results may follow. Since conditions may be somewhat different in every orchard, emergence reports from other orchards even in the same locality cannot be wholly relied upon; hence the importance of spraying timely and thoroughly in order to keep all exposed surfaces covered.

Some growers have in the past omitted some sprays or practiced a system of spraying rather sparingly to avoid leaving a residue upon the fruit, thinking that such methods might facilitate the removal of the spray residue in the fall at harvest time. It is true, light spraying and few sprays may leave little spray residue upon the fruit, and the practice may facilitate the cleaning at the picking period. Most growers prefer, however, to have fruit free from worms, although it may contain more residue and require washing. When harvest time comes, therefore, if there is an objectionable residue, prepare to clean the fruit properly and meet the regulations established for state and inter-state shipments.

Spraying for Worms

I have two apple trees and one plum tree which bear good fruit but the fruit is so wormy that it either falls before ripening, or, if it does ripen, it is too wormy to be eaten. Could you please tell me what should be done to these trees?—J. D., Vt.

YOUR apple trees and plum tree should be sprayed timely and thoroughly in order to prevent injury to the fruit by worms and fungous diseases.

General suggestions for spraying apples consist of using lime-sulphur solution at the rate of about one and one-quarter gallons plus one and one-quarter pounds lead

arsenate to 50 gallons of water, to be used just before the trees bloom or at the cluster bud period. The same spray chemicals at the same dilution should be used at the calyx period or when the blossoms drop and again in about two weeks after this period. It is also possible that one or two later applications, using the same chemicals at the same dilutions may be needed in order to produce good fruit.

In all probability your plum tree is of the American or European variety, in which case you may use the same spray as suggested for the apple trees. In order to prevent injury by burning or russetting, it may be well to cut down the lime-sulphur solution to one gallon to 50 instead of one and one-quarter. It is important that plums be sprayed immediately after the shucks or husks drop from the young fruit following the blossoming period. One or two additional applications at intervals of about 10 days or two weeks are generally necessary for the growing of clean fruit.

Killing Tree Stumps

When can wild apple trees be cut down so as to kill the stumps?—L. S., Conn.

EXPERIENCE and observation have shown that wild apple trees usually sprout less from the stumps if they are cut during late July or in the month of August. This not only applies to apple trees but to other trees as well.

NEW TREE FRUITS

(Continued from page 9)

late-ripening, high-quality plum of the Grand Duke type.

Three Japanese plums, Beauty, Formosa, and Santa Rosa, which Luther Burbank originated 25 or 30 years ago, have been re-introduced. The exact parentage of none of them is known. All were first introduced in California in 1914, 1908, and 1907, following the order in which they are here listed. Beauty is the earliest to ripen and is better in quality than Abundance and Burbank. Formosa ripens early in August following Beauty in season and is also superior to Abundance and Burbank. It is difficult to mention a more beautiful plum than Formosa. Santa Rosa, the next to ripen, is considered about the best of the Japanese plums at Geneva, N. Y. Its fruits are handsome, dark purplish crimson with reddish tinted flesh.

Whatever type of plums are grown, Japanese or European, renewed interest in the culture of this fruit can be stimulated only by growing better sorts. When better plums are available at the public markets and on roadside stands, there will again be some incentive to grow them.

AMERICAN FRUIT GROWER

JULY, 1934

peaches 40%
crop 69,000
Missouri
pects for an
and raspber
is estimated
of peaches
last three yo

Kansas—
very spotted
tions, with n
yield. In s
trees have a
making a fin

Delaware
is much belc
probably 50%
The peach c
of only 10%
Adams.

Maryland
ended, with
The peach c
and oriental
fury. Apple
mate.—A. F.

Virginia—
ted and much
is a good cro
lent in other
Wm. B. Al

West Vir
third succes
slightly unde
U. S. No. 1
than from l
often, scab-in

Kentucky
very spotted.
of the Padu
light set in a

Tennessee
of Stayman
varieties have
the best since
1,200 cars.
period.—E. M

Montana—
excellent for
cherries dan
Everbearing
large. Preser
the crop equa
quality super

Idaho—Po
ripen and is
better in qual
than Abund
Burbank. For
ripens early
in August fo

Beauty in s
and is also s
superior to
Abundance
and Burbank.

It is diffi
to mention
a more bea
tiful plum
than Formosa.

Santa Rom
the next to
ripen, is co
sidered abo
the best of
the Japanes

plums at
Geneva, N. Y.
Its fruits
are handso

me, dark p
urplish cr
imson with
reddish tin

flesh.

Whatever
type of plu
ms are gro
wn, Japan
ese or Eur
opean, re
newed in
terest in
the cultu
re of this

fruit can
be stimu
lated only
by growi
ng better
sorts. Whe
n better p
lums are
availabl
e at the p
ublic mar
kets and
on roads
ide stand
s, there
will aga
in be so
me incen
tive to g
row them.

JULY, 1934

1934 FRUIT CROP PROSPECTS

(Continued from page 2)

peaches 40%, pears 52%, with estimated crop 69,000 bushels.—R. S. Herrick.

Missouri—Never before have prospects for an abundant crop of blackberries and raspberries been better. The apple crop is estimated at 40% of last year. The crop of peaches will perhaps be better than for last three years.—T. J. Talbert.

Kansas—The 1934 apple crop will be very spotted in all the apple growing sections, with not more than a third of a full yield. In spite of the prevailing drought, trees have a heavy, healthy foliage and are making a fine growth.—Chas. A. Scott.

Delaware—The general set of apples is much below the average for all varieties, probably 50% to 60% of last year's harvest. The peach crop has prospects at this time of only 10% to 15% of last year.—J. F. Adams.

Maryland—The strawberry deal is ended, with a shorter crop than in 1933. The peach crop is very light, with curculio and oriental moth doing considerable injury. Apples are showing a 36% crop estimate.—A. F. Vierheller.

Virginia—The apple crop is very spotted and much lighter than last year. There is a good crop of peaches in some orchards but in others almost an entire failure.—Wm. B. Alwood.

West Virginia—This state faces its third successive light crop of apples, slightly under a half crop. Amount of U. S. No. 1 packaged fruit will be greater than last year's aphid and codler eaten, scab-infested crop.—C. R. Miller.

Kentucky—The fruit crop this year is very spotted. No peaches with exception of the Paducah district. Apples have a light set in all varieties.—Ben E. Niles.

Tennessee—There will be a fair crop of Stayman and Golden Delicious. Other varieties have set light. The peach crop is the best since 1931, amounting to 1,000 or 1,200 cars. A high quality crop is expected.—E. M. Prather.

Montana—Present fruit conditions are excellent for sweet cherries, with sour cherries damaged somewhat by frost. Everbearing strawberry crop should be large. Present indications point to an apple crop equal to last year's, with size and quality superior.—Geo. L. Knight.

Iaho—Poor pollination has caused a spotted crop of fruit, particularly apples. Outlook is as follows: Jonathans 1,400 cars, Romes 1,200, Winesaps 500, Delicious 400. The prune crop will be light. All fruits are showing prospects of good quality.—W. H. Wicks.

Colorado—The western Colorado peach crop is in fine condition. Large yields are expected and an above average production.—State Statistician.

Utah—Utah orchards on the whole have fairly good crops. The peach crop is forecast at 585,000 bushels compared with 62,000 bushels last year, and should be marketed a month earlier than normal. The apple crop is estimated at 66% of normal.—Francis M. Coe.

Washington—The red raspberry crop in western Washington this year is about normal.—A. M. Richardson.

The Wenatchee-Okanogan district will live up to its usual reputation as perhaps the most regular deciduous fruit producing area in the world. Apple prospects are bet-

"Control Fungous Diseases and Codling Moth together with the ORTHO Summer Spray Program for Apples and Pears!"

● PROTECT your crop and your trees from Scab, Brooks' Fruit Spot, Codling Moth, and other Insect Pests and Fungous Diseases. The ORTHO Summer Program takes care of them all at the same time. These several ORTHO Sprays singly or in combination provide a complete and proven program for most every summer pest that may attack your crop.

ORTHOL-K

...the proven Summer Oil Spray to use with Lead Arsenate and ORTHO Spreader for Codling Moth control. ORTHOL-K kills the eggs, reduces "stings," and adds greatly to the effectiveness of the Lead Arsenate. Combined with Nicotine Sulphate it has proven highly satisfactory as a substitute for Lead Arsenate. It also cleans up Red Mite, Scale, Leaf Hoppers, Case Bearers, etc., at the same time.



COPOSIL

...an improved colloidal copper fungicide. Rated as safer and more effective than Bordeaux for control of Scab, Brooks' Fruit Spot, Blotch, and similar diseases. Mixes readily with the ORTHOL-K and Lead Arsenate or Nicotine Sulphate combination.

ORTHOL SPREADER

...a better film-builder for use with Arsenical, Sulphur-Arsenical, Lime-Sulphur, Coposil, Bordeaux and other Copper Sprays, and the Lead-Arsenate-Oil combination. Gives more uniform coverage and aids residue removal.

Send for the ORTHO Summer Spray Bulletin and full information

CALIFORNIA SPRAY-CHEMICAL CORP.
214-B West 14th Street, New York
15-B Shattuck Sq., Berkeley, Calif.

ORTHOL-K



AND LEAD ARSENATE
with ORTHOL SPREADER

(and 'Coposil' for Scab and Brooks' Fruit Spot)

ter than last year by approximately 15%. The yield of apricots and peaches is also good, with quality of fruit excellent.—A. R. Chase.

The apple estimate for Yakima is 12,000 cars compared with 9,500 in 1933-34.

The prospects for apples and pears are excellent in the White Salmon district of Washington. In the upper Hood River Valley, scab is taking a big toll, especially in Anjou pears.—W. B. Rine.

California—Apples are reported with light crops. Good grape crops are indicated. Grapefruit 72%, compared with Florida 79%; Arizona 82%; and Texas 40%. Valencia oranges are reported at 74%, while June 1 reports from other states show oranges at 81% in Florida, 95% in Louisiana, 47% in Texas, and 73% in Arizona.

\$3 for one

A single room with bath at The Astor — at as low as \$3 today — gives — leading hotel service; finest New York location; smarter hotel prestige; larger, airier rooms; comfort table furnishings; the leading hotel value.

The ASTOR

entrance TIMES SQUARE...That's New York!

fertilize
your
FRUIT
this fall

with
'AERO'
CYANAMID

AMERICAN FRUIT GROWER

Page 11

SEASONABLE FASHIONS



No. 2843—Pastel Dark Accents! Designed for sizes 14, 16, 18 years, 36, 38 and 40 inches bust. Size 16 requires 3 yards of 39-inch material with $\frac{1}{2}$ yard of 39-inch contrasting.

No. 435—Sailor "Gal" Dress. Designed for sizes 8, 10, 12 and 14 years. Size 8 requires $2\frac{1}{2}$ yards of 39-inch material with 1 yard of 39-inch contrasting and $\frac{3}{4}$ yards of braid.

No. 2911—Sophisticated Sheer Dress. Designed for sizes 36, 38, 40, 42, 44, 46 and 48 inches bust. Size 36 requires $3\frac{1}{2}$ yards of 39-inch material with $\frac{3}{4}$ yard of 35-inch contrasting.

No. 2875—Smart and Feminine. Designed for sizes 36, 38, 40, 42, 44, 46 and 48 inches bust. Size 36 requires $4\frac{1}{4}$ yards of 39-inch material with $\frac{1}{2}$ yard of 39-inch contrasting.

No. 674—For Small Daughter. Designed for sizes 8, 10, 12 and 14 years. Size 8 requires 2 yards of 39-inch material with 1 yard of 39-inch contrasting.

No. 2869—Excitingly New! Designed for sizes 14, 16, 18 years, 36, 38 and 40 inches bust. Size 16 requires $3\frac{3}{4}$ yards of 39-inch material.

Patterns may be secured by mail, postage prepaid, at 15 cents each from FASHION DEPARTMENT, AMERICAN FRUIT GROWER, 1370 Ontario St., Cleveland, Ohio. Be sure to state size required. Enclose 10 cents additional for Fashion Magazine (15 cents where no pattern is ordered).

REMOVING FRUIT STAINS

By MARY LEE ADAMS

THROUGHOUT the season of abundant fruit, table linen and light colored summer clothes are often exposed to fruit stains. If we happen to live in the southern states, optimistic darkey laundresses will try to sooth our annoyance by saying cheerfully—"Tain't no use to worry, Honey, soon as de fruit season pass de stains go too if you jus' let 'em alone." This is a comfortable doctrine, saving some trouble and not infrequently proving correct in the case of often laundered, lightly stained materials.

Good authorities hold that practically all fruit stains while still fresh and moist, can be removed by hot water. The stains are much harder to get rid of if allowed to dry first. Cooked fruit stains especially, often disappear in the ordinary laundering. Cooking implies more sugar content and affects the chemical nature of the coloring matter of fruit juices.

Some fruits when cooked leave dark red or purple stains. These should be treated like fresh fruit stains. Any residuum of pulp being first gently rubbed out in hot water, stretch white or fast color washable materials tightly over a bowl. An elastic band is handy for keeping the cloth in place. Then pour upon the stain boiling water from a tea kettle held about a yard above the spot. Non-washable materials may be sponged gently with warm water.

If the stain is not entirely removed after pouring on the boiling water, it will often bleach if hung up quite wet in the sun until dry. Try an application of full strength lemon juice just previous to drying in bright sunlight. A coating of salt spread over the stain before applying the lemon juice adds to its effectiveness.

When your table linen is marred by citrus fruit stains, by all means avoid ironing until the stain is removed. Ordinary laundering may prove sufficient, otherwise potassium permanganate will likely do a good job. A safe rule when using any chemical that might injure the fabric is to apply it on the wrong side of material laid on an absorbent pad, as described above—then rinse in warm water.

Soap and water are all right for removing some fruit stains but as the majority of such stains are set by alkalis, it is advisable to avoid soap unless first tested on some scrap of

similar material stained with the same juice.

The vivid poke-berry seems to hold irresistible attraction for most youngsters, and seldom can they successfully hide traces of too intimate contact with the generously juiced berries. A thrilling experimental excursion into the methods of making one's own ink (as Robinson Crusoe surely would have done) results deplorably. Poke is a double-dyed villain when it comes to stains, producing a mothy effect of which the red often vies with the green.

Two separate methods must then be practiced. First the red must be treated as previously described in the case of fresh fruit stains or the dark and purple stains of some cooked fruits. Stretch the material over a bowl and pour on boiling water from the elevated spout of a tea-kettle. Sponge non-washable material gently with warm water.

Having removed the red, you may now attack the green stain. This is likely caused by chlorophyll which is present also in grass and other fresh green foliage. All of these green stains are subject to the following treatment: Rub the stain vigorously with hot water and soap if the material is washable. If not washable, sponge the stain with either denatured or wood alcohol.

For this application use a pad of folded absorbent cloth or, preferably, a sheet of blotting paper under the stained piece which is laid wrong side up so that the liquid may be applied from the back. Take a clean cloth dipped in the liquid and squeezed until not too wet. Dab on gently, using a circular motion round the edges of the moist spot to prevent ringing.

1934 Century of Progress

A CENTURY of Progress Exposition re-opened its gates to the world on May 26. It already shows promise of being every way a better and more spectacular exposition than its 1933 predecessor, which attracted nearly 22,500,000 visitors.

The horticultural exhibit, as a result of the contracts entered into some months ago with the Society of American Florists and the Society of Ornamental Horticulturists, will be much larger and more elaborate than last year. The avowed purpose of the officials of the society is to have at the World's Fair of 1934 the most complete and greatest flower show that has ever been given in the United States.



The home canner may make a choice from several types of glass jars

CANNING FOOD for HEALTH and ECONOMY

By Myra Potter Bregger

THE homemaker during periods of plenty and scarcity alike has the problem of furnishing the family with a wholesome and varied diet. An abundant use of fruits and vegetables will furnish the vitamins, minerals and roughage which are so necessary for the maintenance of health.

A food preservation plan and a budget for the year should be carefully studied early in the summer. Canning methods are now well standardized, and when the food products are available at reasonable prices, the homemaker can ill afford not to preserve these foods for use during the winter season. Most fruit and vegetable budgets will need to be planned for at least eight months, October 1 to June 1, or for a period of 35 weeks.

The daily diet should furnish two servings of vegetables besides potatoes, and two of fruit. Emphasis is placed upon the green and yellow vegetables as they are rich in vitamin A, an abundance of which promotes health and vigor. Whenever possible, a good supply of tomatoes should be canned, as this vegetable retains its vitamin C content. Vitamin C must be supplied in the diet daily as it is essential for general body maintenance, and particularly important for the formation and maintenance of the teeth. There is very little vitamin C in any of the other canned products except in the case of tomatoes, in which the vitamin content almost equals the raw product.

A canning budget for the year will greatly aid the homemaker in furnishing to the family its vegetable and fruit requirements. A simple

method is to plan for one canned vegetable and one canned fruit daily. It would be best to can enough tomatoes to give three servings per week. The other vegetables can be supplied from storage and by the purchase of a fresh vegetable now and then. The second serving of fruit may be fresh or dried. Raw apples are a fine source of vitamins and of valuable minerals.

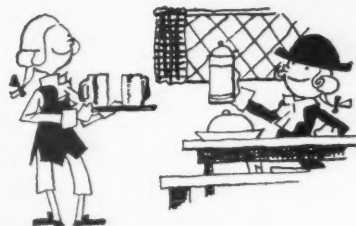
If many guests are entertained in the home, the canning budget should be expanded. A simple canning budget for a family of five or six covering a period of 35 weeks might be as follows:

Product	Use	Amount
Greens	Twice a week	70 quarts
Tomatoes	Three times a week	105 quarts
Other vegetables	Three times a week	105 quarts
Fruits	Seven times a week	245 quarts

To the above budget there should be added the delicacies and unusual preserved foods which do so much toward making the menus appetizing. This list should be planned strictly in accordance with the tastes of the family, allowing past experience to guide the quantities to be preserved. This special list might include jelly, preserves, jam, pickles, fruit butter, conserves, fruit juice drinks, and catsups. These products also make perfect small gifts. Many times one is called upon for contributions to community suppers, a matter which should be considered in the preservation budget. Meats can be canned successfully at home, but greater care must be exercised than in the case of fruits and vegetables in order to have a product which is safe for consumption.

Success in household canning necessitates accuracy in following directions to prevent spoilage. Such

AMERICAN FRUIT GROWER



THERE ARE TWO... "REAL NEW ENGLAND INNS" IN MICHIGAN...

DEARBORN INN and The ST. CLAIR INN

DEARBORN INN is just twenty minutes from the center of Detroit, where the famous Greenfield Village and Edison Museum Institute are located.

THE ST. CLAIR INN is on St. Clair River, scene of the famous international motorboat races—a quick run of 60 miles from Detroit.

Both will welcome you with good food, real comfort and friendly, willing service.

OPERATED BY
**L. G. TREADWAY SERVICE
CORPORATION**
247 Park Avenue New York, N. Y.

IN PHILADELPHIA In the Heart of Things



HERE one may live graciously, yet inexpensively... where modern luxuries combine with friendly hospitality to assure an enjoyable visit... You may properly expect precise, thoughtful service and a cuisine that is one of the enduring traditions of this world-famous hotel.

Claude H. Bennett
General Manager

**BELLEVUE
STRATFORD**

spoilage is caused by yeasts, molds, bacteria, and enzymes. Yeasts and molds grow in the presence of acid, where they are easily destroyed by heat. These organisms require

Page 13

OPPORTUNITY ADS

Only 15c a Word — CASH WITH ORDER

ADDRESS: AMERICAN FRUIT GROWER
1370 Ontario Street, Cleveland, Ohio

CIDER MILLS

CIDER AND GRAPE PRESSES. GRATERS, Screens, Pumps, Filters, Supplies. Free booklet F tells how one made money with roadside mill, and how to keep cider sweet. PALMER BROS., COS COB, Conn.

FENCING—ELECTRIC

CUT FENCING COSTS 80%

Farms now using 110 volt alternating current save 80% with Electric One-Wire Fencing. Uses one strand of common barbed wire; one-quarter the ordinary number of posts; requires one-fifth the labor; no gates. Write—

ONE-WIRE FENCE COMPANY

B-30

Whitewater, Wisconsin

FRUIT GRADERS

"Handles the Fruit with Rubber Gloves" The Butler Simplex Fruit Grader has soft rubber sizing cups with interchangeable rings. Change to any desired size instantly. Cannot bruise. Elevates fruit from low hopper and rotates for inspection. Requires but one square yard for storage. Motor driven. Oilless bearings. Half the price of comparable graders. Fred C. Butler, Manufacturer, 707 Hanna Bldg., Cleveland, Ohio.

WANTED—USED APPLE GRADER, LATE MODEL. Swartz Bros., Waukesha, Wis.

HOSIERY

LADIES' BEAUTIFUL SILK HOSE. SLIGHTLY Imperfect. 5 pairs \$1.00, postpaid. Satisfaction Guaranteed. Economy Hosiery Co., Asheboro, N. C.

ORCHARD SUPPLIES

NEW AND USED FRUIT CLEANERS, WASHERS, graders, sprayers, dusters, picking and packing supplies. Cory Orchard Supply Co., 136 So. Senate Ave., Indianapolis, Indiana.

PERSONAL

OLD AGE PENSION INFORMATION. ENCLOSE stamp. Judge Lehman, Humboldt, Kans.

PHOTO FINISHING

ROLLS DEVELOPED. TWO BEAUTIFUL DOUBLE-weight professional enlargements and eight guaranteed Never-Fade Perfect Tone Prints. 25¢ coin. RAYS PHOTO SERVICE, La Crosse, Wisconsin.

COLOR ENLARGEMENT WITH EACH ROLL Developed, printed 25¢. Quality work, prompt service. LaCrosse Film Company, LaCrosse, Wis.

PLANT PATENTS

▲ PATENTS ▲

Send me sketch, picture, or model of your new invention. I will give you prompt report on its probable patentability based on a search of the patent records for a small charge.

PLANTS, BUSHES, TREES, VINES, etc., can now be protected by Patents. I can furnish copies of any or all plant patents issued to date.

GEORGE E. COOK

Registered Patent Attorney

International Bldg. Washington, D. C.

JAMES ATKINS

Registered Patent Attorney

Munsey Building Washington, D. C.

Inventions patented. Trade-marks and copyrights registered

Correspondence solicited

SALESMEN WANTED

SALESMEN WANTED—MANY STARK SALESMEN make more than \$200.00 per month during spare time. You can do as well. Pleasant outdoor work. No experience necessary. Big Pay Weekly. We furnish Big Sales Making Outfit Free. Write at once for full information. If you can't sell, WRITE FOR CATALOG. Stark Nurseries, Box C-174, Louisiana, Mo.

air, moisture, heat, and the presence of sugar and starch for food. Bacteria are resistant to heat, but are quite easily destroyed in an acid medium. Hence the acid fruits and tomatoes are easily preserved.

Bacteria have two forms, a growing and a resting or spore form. The growing bacteria are killed by boiling for a few minutes, but the spores sometimes withstand several hours of boiling. Bacteria grow best in a non-acid medium, which means that the preservation of the non-acid vegetables and of meats is much more difficult than the acid products. A poisonous type of spore-forming bacteria causing the disease called botulism, is sometimes not destroyed in home-canned meat and in non-acid vegetables, such as string beans, corn, asparagus, and spinach. The pressure cooker is therefore recommended for the canning of these foods in order to prevent spoilage and the possibility of poisoning.

Safe Methods of Canning

Open Kettle—The open kettle method of canning is used for acid fruits and tomatoes, but should never be used for the non-acid vegetables and meat. The food is boiled in an open kettle until tender and until the organisms which cause spoilage are killed. The food is then canned, using equipment which has been boiled or sterilized to kill the spoilage agents on them.

Hot Pack—This method is considered one of the best for home canners. Food prepared as for the table is packed boiling hot into sterile containers, after which the cooking or processing is completed in the water bath or in the pressure cooker. The water bath method is used for fruits and tomatoes. In the canning of meats and non-acid vegetables, however, it is advisable to use the pressure cooker for adequate safety.

Canning Equipment

Glass cans are in general use for home canning. Any glass jar which can be sterilized and then sealed air-tight may be employed. New jar rubbers should be used, as rubber deteriorates with age. There are various types of jar tops, which fall into three general classes: the screw top or Mason; a glass top which is held in place by wire clamps on the jar; and a gold lacquered lid which seals automatically with the aid of a clamp or screw band as

the jar cools. It is of utmost importance that each jar of food is tightly sealed, for the entrance of even a little air will introduce organisms which will cause spoilage. A fundamental canning principle is to have good jars with covers which fit perfectly.

Tin cans are now being used by some homemakers for large quantity canning. The use of these cans calls for an investment in a special sealer which will, however, last for many years.

For hot pack canning, a water bath will be required. This may make use of a large kettle, a wash boiler, a lard can, or any receptacle with a tightly fitting cover, which will hold a number of jars. Some sort of a false bottom, or rack, an inch high, must be used to allow circulation of water under the jars. The container must have sufficient depth to allow the water to cover the jars at least two inches. The hot water bath is used for acid fruits and tomatoes.

The pressure cooker makes it possible to heat the non-acid vegetables and meats to a temperature above the boiling point of water, which will destroy the bacteria which are in the spore form. A pressure cooker should be selected which would be suitable in size for general food preparation. In some neighborhoods, however, pressure cookers are owned collectively by several families, for use essentially during the canning season.

The cold pack method of canning is no longer recommended as a safe practice by the Bureau of Home Economics of the U. S. Department of Agriculture. The method of preservation is characterized as wasteful and dangerous.

Before starting seriously to do canning, one should send to the U. S. Department of Agriculture, Washington, D. C., for Farmers' Bulletin No. 1471 entitled "Canning Fruits and Vegetables." This bulletin contains the most authoritative information on food canning available at this time. In addition, through the Extension Service of the various state colleges, other bulletins are available which will prove helpful in your summer and fall canning activities.

For the entire United States, pears are reported at 59% of a full crop. Among the more important pear states, the July 1 forecasts are: New York 50%, Michigan 59%, Colorado 69%, Washington, Oregon and California each 63%.

Reports from all prune areas of California show an outlook of 60% of a crop. The Washington dried prune crop is reported at 53%, with Oregon at 51%.



Come to CEDAR POINT ON LAKE ERIE

JUNE 16th TO SEPTEMBER 3rd

Finest Bathing Beach in the World...
Largest Hotels on the Great Lakes...
Fishing...Golf...Tennis...and all Recreational Attractions...Moderately Priced,
Appetizing Meals...Ample Garages...
Free Parking Space...Ideal for a day, week-end or entire vacation...1000 outside rooms at reasonable rates.
Write for folder.

Easily reached by Auto on Ohio Route 2, U.S. 6; or by Rail, Interurban or Steamer.

THE G. A. BOECKLING COMPANY, Owners
Cedar Point, Sandusky, Ohio

AMERICAN FRUIT GROWER



Fruit Growers are buying Supplies and Equipment all year round

ORCHARD TOOLS & SUPPLIES

Pruning Tools Packing Equipment Hand Sprayers & Dusters
Grafting Tools & Wax Spray Guns & Nozzles Irrigation Equipment
Wound Dressings Spray Hose & Connections Orchard Thermometers, etc.
Picking Equipment Spraying Clothing

If you do not find what you need here, write
American Fruit Grower, 1370 Ontario St., Cleveland, O.



"That reminds me that I must order immediately"

WHICH WOULD YOU BUY?

(Continued from page 5)

convenience. Both blueberries and strawberries are now being merchandised with cellophane wrappings in smart, compact containers. The cellophane protects the fruit from dust, dirt and promiscuous handling and, at the same time, gives the purchaser the opportunity to see that the berries are of high quality.

A nationally famous merchandiser and packaging expert recently stated that in sending goods to market, the thing most often neglected was the principle of consideration. "Consideration," he says, "means putting one's self in the other person's shoes. Applied to package design, it becomes an effort to make the package or object used as convenient, pleasant and efficient as possible."

Until comparatively recent times, fruit has been packed to suit the convenience of the producer, picker and shipper. The consumers—the fifty million women who do most of our retail buying—have not been considered. Fruit containers have

been tested for packing convenience and shipping strength, but only rarely for customer convenience.

Practically all fruit lends itself to the artistry of the modern package design, and the materials used by the modern package expert—paperboard, corrugated board, cellophane, and colored, shredded paper for nesting fruit—all add to the proper protection and better display of fruit.

With the majority of fruits, and especially apples, their own attractive coloring is the greatest sales asset. Yet old fruit wrappers, because they were not transparent, concealed the very thing that helped most to attract the ultimate purchaser. Today, cellophane and other transparent materials make it possible to wrap and display fruit for retail sales in such a way that its natural beauty is protected and at the same time enhanced in the eyes of the purchaser.

In packages of varying sizes, corrugated liners now can be used to keep the fruit in its packed position without danger of bruising, while colored, shredded paper, used for nesting, not only serves a protective purpose, but gives a background of color effects to complement the natural colors of the fruit and thereby add again to its eye appeal.

Consider the lowly can which for years has served as a container for vegetables, fruits and other foods. Just recently, something new in merchandising happened to the standard can—with the result that sales increased 340% in a series of scientific merchandising tests.

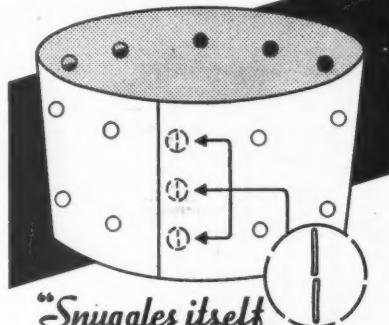
What was this miracle of merchandising? Nothing more than putting a "window" or glass-end, in the can so that the purchaser could see what he or she was buying.

With so many major industries selling the "package" idea to the consumer, it is time for the fruit grower to cash in on the merchandising opportunity offered for his products. Packaging means increased consumer acceptance and increased profits. On the average, packaged fruits will

AMERICAN FRUIT GROWER

SPEED-Y-PAK BASKET LINER

PATENT NO. 1,927,218



"Snuggles itself to a perfect fit"

SUTHERLAND'S Patent Perforated Circle "gives" under pressure of the contents, permitting the liner to expand to a perfect fit. Made of high grade stock, in either green one side or plain. They come ready for immediate use without any assembling operation. Write for samples and prices. Sales territories open to reliable dealers.

SUTHERLAND PAPER COMPANY

1400 N. Pitcher St. Kalamazoo, Mich.

Agents Wanted FRUIT PICKING BAGS

Regular Stock Models, or Special Designs for any need. Highest Quality. Moderate Prices. Excellent Commissions. Write to—

M. D. SMITH

TENT & AWNING COMPANY

128 Marietta St. Atlanta, Ga.

bring 10% more in the market than fruit shipped and sold in old style, bulk containers.

The fruit grower who still has misgivings about modern packaging as a merchandising aid, should ask himself, the next time he goes to market, which he would buy, given an unbiased choice—fruit from the bushel basket on the floor, or fruit in the eye-appealing, easy to carry, handy package displayed on the counter.

If the fruit grower himself doesn't know the answer, let him ask his wife.

Page 15



For Better Condition and Better Prices . . .

Processer Myracol Oiled Shreds are made to a high standard of quality and provide maximum efficiency in protecting apples, pears, peaches, etc. against scald. . . . Packed in convenient 25 lb. cartons. The bright, deep colors—choice of purple, green or red—mean attention value, quality appeal. Better prices result. . . . Wise growers are making more money by dressing up their fruit with Myracol packing specialties—including: Many types of Wraps . . . colored Fringes . . . Liners and Basket Caps . . . also paper-board packages and shipping cases.

These specialties can get higher prices for your fruit. . . . Write for free samples and name of nearest dealer.

Packing Materials Division
PAPER STOCK COMPANY, 462 W. Ohio St., Chicago

Myracol
PACKING SPECIALTIES
FOR FRUIT AND VEGETABLES

JULY, 1934



CONTACT-FILM CONTROL of Late Brood Codling Moth

"Black Leaf 40" with Summer-Oil and "Black Leaf 155" produce more packed, salable fruit—without illegal residue. They protect the fruit and foliage with a contact-film that is highly toxic to codling moth and greatly reduces stings. These Combinations are offered as proven developments in line with the actual needs of growers for improving codling moth control, without illegal poison residues.

WHAT IS THE COST?

The crop, when you pick, grade and pack it, is the answer. Any spray material that is used against codling moth and fails to control the pest or injures and destroys foliage, is expensive, no matter how little it costs. *"The question of cost includes not only the cost of material and the expense of applying it, but must be considered from the standpoint of the clean fruit produced by the process."* (Page 15, February, 1934 Journal of Economic Entomology).

"BLACK LEAF 155"

Non-Volatile (Patent Applied For)

This product is a specially processed "Black Leaf 40"—ben-tonite insecticide in which the nicotine is non-volatile. Contains special fixing and spreading agents. Has the characteristics of the ideal non-volatile nicotine insecticide. Use "Black Leaf 155" in late brood sprays for improved control of late worms, better foliage and higher grade fruit. Does not leave illegal residue itself and does not complicate removal of residues from early brood sprays. Mixes readily with water in the spray tank to form a suspension of very fine particles.

"Black Leaf 155" is packed in 5-lb. sacks, 10 per case. The dosage recommended is 5 pounds of "Black Leaf 155" per 100 gallons of water. WRITE FOR BULLETIN 928.

"BLACK LEAF 40"—SUMMER-OIL

This Combination furnishes a protective contact-film on the foliage and fruit which stops codling moth. It is active—kills adult moths, eggs and larvae by contact, fumes and vapors. Also kills aphids, leafhoppers and mites.

TOBACCO BY-PRODUCTS & CHEMICAL CORP.

INCORPORATED

Louisville, Kentucky

Manufacturers of "Black Leaf 40"

**"Black
Leaf 40"**